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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,672	07/15/2003	Michael Binnard	PA0518-US / 11269.56	8643

7590 10/13/2004  
The Law Office of Steven G. Roeder  
5560 Chelsea Avenue  
La Jolla, CA 92037

EXAMINER
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LE, DANG D

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 10/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/620,672	BINNARD, MICHAEL	
	<b>Examiner</b>	<b>Art Unit</b>	
	Dang D Le	2834	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/15/03 &amp; 9/29/03</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8, 10, 11, 13, 15, 20-23, 26-29, 31, 32 and 36-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Ogura et al. (3,906,261).

Regarding claims 1, 20 and 36, Ogura et al. shows a circulation system (Figure 1) for a mover that includes a first inlet (36) and a second inlet (110, right), the circulation system comprising a fluid source (12) that directs a first fluid (28) into the first inlet (36) and a second fluid (water) into the second inlet, the fluid source including a first conduit (102) that transports the first fluid and a second conduit (106) that transports the second fluid, wherein at least a portion of the second conduit (106) is encircled by the first conduit (102), wherein a temperature of the second fluid at the second inlet is different than a temperature of the first fluid at the first inlet.

Regarding claims 2-4, 21-23 and 37-39, it is noted that Ogura et al. also show all of the limitations of the claimed invention since the boiling point of Freon-113 is 48 degrees Celsius and water at room temperature is 24 degrees Celsius.

Regarding claims 5-8, 10, 11, 13, 15, 26-29, 31, 32 and 40-45, it is noted that Ogura et al. also show all of the limitations of the claimed invention.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogura et al. in view of Campolong (3,318,253)

Regarding claims 9 and 30, Ogura et al. shows all of the limitations of the claimed invention except for the conductor component including a conductor array and the first passageway encircles at least a portion of the conductor array and the conductor array encircles at least a portion of the second passageway.

Campolong shows the first passageway encircling at least a portion of the conductor array (42) and the conductor array encircling at least a portion of the second passageway (35) for the purpose of reducing heat.

Since Ogura et al. and Campolong are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the conductor component with a conductor array and encircling the first passageway at least a portion of the conductor array and encircling the conductor array at least a portion of the second passageway as taught by Campolong for the purpose discussed above.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogura et al. in view of Hirabayashi et al. (5,434,549)

Regarding claim 12, Ogura et al. shows all of the limitations of the claimed invention except for the pair of spaced magnet arrays.

Hirabayashi et al. shows the pair of spaced magnet arrays for the purpose of making an actuator.

Since Ogura et al. and Hirabayashi et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include the pair of spaced magnet arrays as taught by Hirabayashi et al. for the purpose discussed above.

6. Claims 14, 16-19, 32-35 and 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogura et al. in view of Yuan (5,777,403)

Regarding claims 14, 16-19, 32-35 and 47-49, Ogura et al. shows all of the limitations of the claimed invention except for the voice coil, stage assembly, exposure apparatus.

Yuan shows the voice coil, stage assembly, and exposure apparatus for the purpose of making an actuator.

Since Ogura et al. and Yuan are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the voice coil, stage assembly, exposure apparatus as taught by Yuan for the purpose discussed above.

7. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogura et al.

Regarding claims 24 and 25, Ogura et al. shows all of the limitations of the claimed invention except for encircling percentage.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to encircle the second conduit either 10% or 50% within the first conduit, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

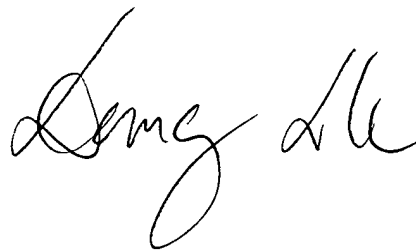
***Information on How to Contact USPTO***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (571) 272-2027. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9/29/04

A handwritten signature in black ink, appearing to read "Dangle", written in a cursive style.

**DANGLE  
PRIMARY EXAMINER**